CLAIMS

1. A data transport system comprising a head end router coupled to a data source, a plurality of downstream routers each for connection to at least one addressable site and each coupled to the head end router by a high bandwidth forward data path; each of the downstream routers being connectable by a switchable low bandwidth return path, the head end router selecting the return control path from downstream routers by causing set-up of the respective return path to one of the downstream routers.

2. A data transport system as claimed in claim 1 in which remote site user addresses are selected such that all of the remote sites being served are on a single subnet for the forward data path.

3. A data transport system as claimed in claim 1 ~~or claim 2~~, in which user addresses are selected such that all of the remote sites being served are on a single subnet for the switchable return data path.

4. A data transport system as claimed in claim 1, ~~claim 2 or claim 3~~, in which the high bandwidth forward data path is an asynchronous transfer mode (ATM) permanent virtual circuit (PVC).

5. A data transport system as claimed in claim 4, in which the PVC includes, at least in part, a link through a satellite broadcast channel.

6. A data transport system as claimed in ~~any preceding claim~~ claim 1, in which the switchable return path is a public switched telephone network (PSTN) path.

7. A data transport system as claimed in ~~any preceding claim~~ claim 1, in which the head end router packages multicast messages within an addressed data packet whereby multicast data is tunnelled from the head end to the respective or each respective remote site.

8. Apparatus for a data transport system using an asymmetric data connection, the apparatus comprising:

a head end router couplable to an ATM PVC;

a PSTN modem coupled to the head end router;

a plurality of downstream routers each couplable to the ATM PVC via respective ATM interfaces; and

a plurality of downstream PSTN modems each coupled to a respective downstream router via a respective serial interface, each ATM interface of each respective downstream router being allocated, in use, a respective IP address in a single subnet, and each serial interface of each respective downstream router being allocated, in use, a respective IP address in a single subnet.

9. Apparatus according to claim 8, wherein each downstream router is arranged in queues to receive data from the head end router via the same ATM PVC.

10. Apparatus according to claim 8 ~~or claim 9~~, in which the head end router includes a modem address mapping table operable to map the IP address of each of the said serial interfaces to the respective downstream PSTN modem to which each serial interface is connected.

11. Apparatus according to claim 10, wherein the head end router is arranged to cause the head end PSTN modem to establish a connection with a predetermined one of the downstream PSTN modems using the modem address mapping table when a predetermined activation packet is received by the head end router for routing to the IP address of one of the serial interfaces.

12. Apparatus according to claim 11, wherein the predetermined activation packets are supplied to the head end router according to a predetermined timetable.

13. Apparatus according to ~~any one of~~ claim~~s~~ 8 ~~to 12~~, wherein the head end router includes an ATM address mapping table operable to map the IP address of each of the said ATM interfaces to a predetermined ATM VCI and VPI.

14. A method of establishing an asymmetric data connection comprising establishing a unidirectional ATM connection between a head end router and a plurality of downstream routers all of the downstream routers being connected to the head end router via the same PVC, receiving a predetermined activation packet at the head end router, reading the IP address of the activation packet and extracting connection information from a modem mapping table using the IP address to index the table and dialling from a PSTN modem connected to the head end router to a PSTN modem connected to one of the downstream routers using the connection information in order to establish a return data connection over the PSTN between the head router and the downstream router.

15. A method according to claim 14, wherein the ATM interfaces of the downstream routers are allocated respective IP addresses in a common subnet.

16. A method according to claim 14 ~~or claim 15~~, wherein the modem interfaces of the downstream routers are allocated respective IP addresses in a common subnet.

17. A method according to claim 14, ~~claim 15 or claim 16~~, wherein the activation packet is received according to a predetermined timetable.